

# First record of *Cyrtodactylus papuensis* (Brongersma, 1934) (Reptilia: Geckonidae) outside mainland New Guinea

HERBERT RÖSLER<sup>1</sup>, ULRICH SCHEIDT<sup>2</sup>, DMITRY TELNOV<sup>3</sup>

1 – Senckenberg Naturhistorische Sammlungen Dresden, Museum für Tierkunde, Königsbrücker Landstraße 159, D-01109, Dresden, Germany; herbertroesler@aol.com

2 – Naturkundemuseum Erfurt, Große Arche 14, D-99084, Erfurt, Germany; ulrich.scheidt@erfurt.de

3 – Dārza iela 10, LV-2130, Dzidriņas, Stopiņu novads, Latvia; anthicus@gmail.com

**Abstract:** A new record of *Cyrtodactylus papuensis* from Misool Island (Raja Ampat Islands) is discussed.

**Key words:** Reptilia, *Cyrtodactylus papuensis*, Indonesian New Guinea.

On 27.03.2009, the third author, together with Kristine Greķe spotted three remarkable geckos nearby an insect light trapping system in primary rainforest on Misool Island, Raja Ampat Archipelago (East Indonesia) (Plate 125, map 1). Two of the observed specimens were collected, alcohol-fixed, and given to the collection of the Naturkundemuseum Erfurt, Germany under the number NMER 774/13. Exact locality for specimens: Indonesia E, Raja Ampat Archipelago, Misool Is. SW, distr. Misool Utara, Aduwey vill. ~4 km NW, valley of River Hakau, 1°58'46"S, 129°54'37"E, 27.III.2009, primary lowland rainforest.

During taxonomic studies on the museum's collection, the two Misool specimens were identified as *Cyrtodactylus papuensis* (Brongersma, 1934) (Rösler, Scheidt 2013). They are similar to *Cyrtodactylus marmoratus* (Gray, 1831), but exhibit the following diagnostic features: lateral fold with conical tubercle, more than 50 ventrals between lateral folds, narrow pre-cloacal pit and large pre-cloacal scales separated from enlarged femoral scales by tiny intermedial scales (Brongersma 1928, 1934; Gray 1831; Kraus 2008; Rösler et al. 2007). The discovery of this species on Misool Island represents the first record of *Cyrtodactylus papuensis* outside the mainland of New Guinea Island, where this species is widely distributed in the western part (Bauer 1994; Loveridge 1948; Rösler et al. 2005).

The observation site situated in the southern part of Misool Island, in the valley of the small river

Hakau, about 4 km northwest of Aduway village (often cited as Adua on older maps) and about 3.5-4.5 km straight line direction North from the coast of Seram Sea (Laut Seram), at the foot of a ridge (maximum height about 400 m) directed west-east. Whereas most formations on Misool Island are calciphilous or karst formations, this ridge is formed of basalt.

The observation site (Plate 126) is located in primary riverine lowland rainforest, which is affected by high water flow from the ridge. In the collection area, sparsely situated trees allow ample sun exposure, supporting growth of bushes and lianas among the trees. So, although this riverine rainforest somewhat resembles secondary (selectively logged) forest, it is in fact, primary. This spot in a riverine is generally lighter and warmer than surrounded closed-canopy rainforest.

Specimens were observed at nighttime, about 20:00 local time on shrubs, about 1-1.5 m above ground level. They were not very agile and were easily grasped by hands. Daytime temperatures at the site were ~29-35°C, but dropped at nighttime, to 23-25°C.

## Acknowledgements

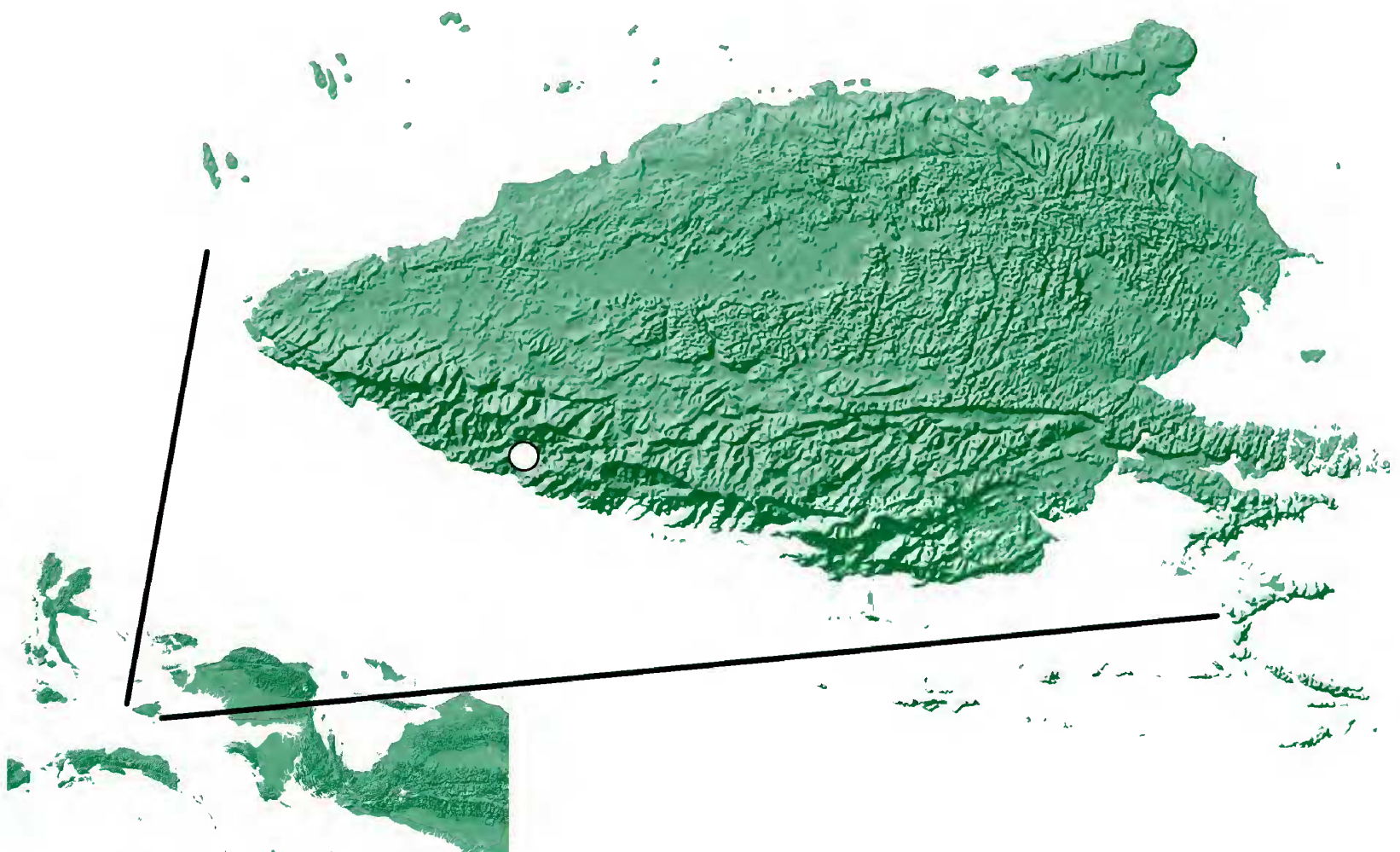
We are grateful to Prof. Darren A. Pollock (Eastern New Mexico University, Portales, U.S.A.) for proofreading of the manuscript. Dr. Mārtiņš Kalniņš (the Entomological Society of Latvia,



Sigulda) is thanked for the photographs of observed specimens.

## References

- Bauer A.M. 1994. Gekkonidae (Reptilia, Sauria), Part I Australia and Oceania. – *Das Tierreich* **109**: i-xii, 1-306.
- Brongersma L.D. 1928. Neue Reptilien aus dem Zoologischen Museum Amsterdam. – *Zoologischer Anzeiger* **75**: 251-257.
- Brongersma L.D. 1934. Contributions to the Indo-Australian herpetology. – *Zoologische Mededeelingen* **17**: 161-251.
- Gray J.E. 1831. A synopsis of the species of the class Reptilia: 1-110. In: Griffith E. (ed.) *The Animal Kingdom arranged in conformity with its organization, by the Baron Cuvier, member of the Institute of France & &, with additional descriptions of all the species hitherto named, and of many not before noticed by Edward Griffith*. Volume **9**. London, Whittaker, Treacher & Co: 481 pp.
- Kraus F. 2008. Taxonomic partitioning of *Cyrtodactylus lousiadensis* (Lacertilia: Gekkonidae) from Papua New Guinea. – *Zootaxa* **1883**: 1-27.
- Loveridge A. 1948. New Guinean reptiles and amphibians in the Museum of Comparative Zoölogy and United States National Museum. – *Bulletin of the Museum of Comparative Zoology* **101**: 305-430.
- Rösler H., Scheidt U. 2013. Die herpetologische Sammlung des Naturkundemuseums Erfurt 1. Teil: Verzeichnis der Geckos (Reptilia: Squamata: Gekkota). – *Vernate* **32**: 235-256.
- Rösler H., Glaw F., Günther R. 2005. Aktualisierte Liste der Geckos von Neuguinea (Sauria: Gekkonidae: Gekkoninae) mit vorläufiger Beschreibung von neun Formen aus den Gattungen *Cyrtodactylus* Gray, 1827, *Gehyra* Gray, 1834 und *Nactus* Kluge, 1983. – *Gekkota* **5**: 33-64.
- Rösler H., Richards S.J., Günther R. 2007. Remarks on morphology and taxonomy of geckos of genus *Cyrtodactylus* Gray, 1827 occurring east of Wallacea, with descriptions of two new species (Reptilia: Sauria: Gekkonidae). – *Salamandra* **43**: 193-230.



Map 1. Collecting locality of *Cyrtodactylus papuensis* (Brongersma, 1934) on Misool Island, eastern Indonesia (prepared with ArcGIS 9 software).





**Plate 125**

RÖSLER, H., SCHEIDT, U. & TELNOV, D.: First record of *Cyrtodactylus papuensis* (Brongersma, 1934) ...



1

2

3

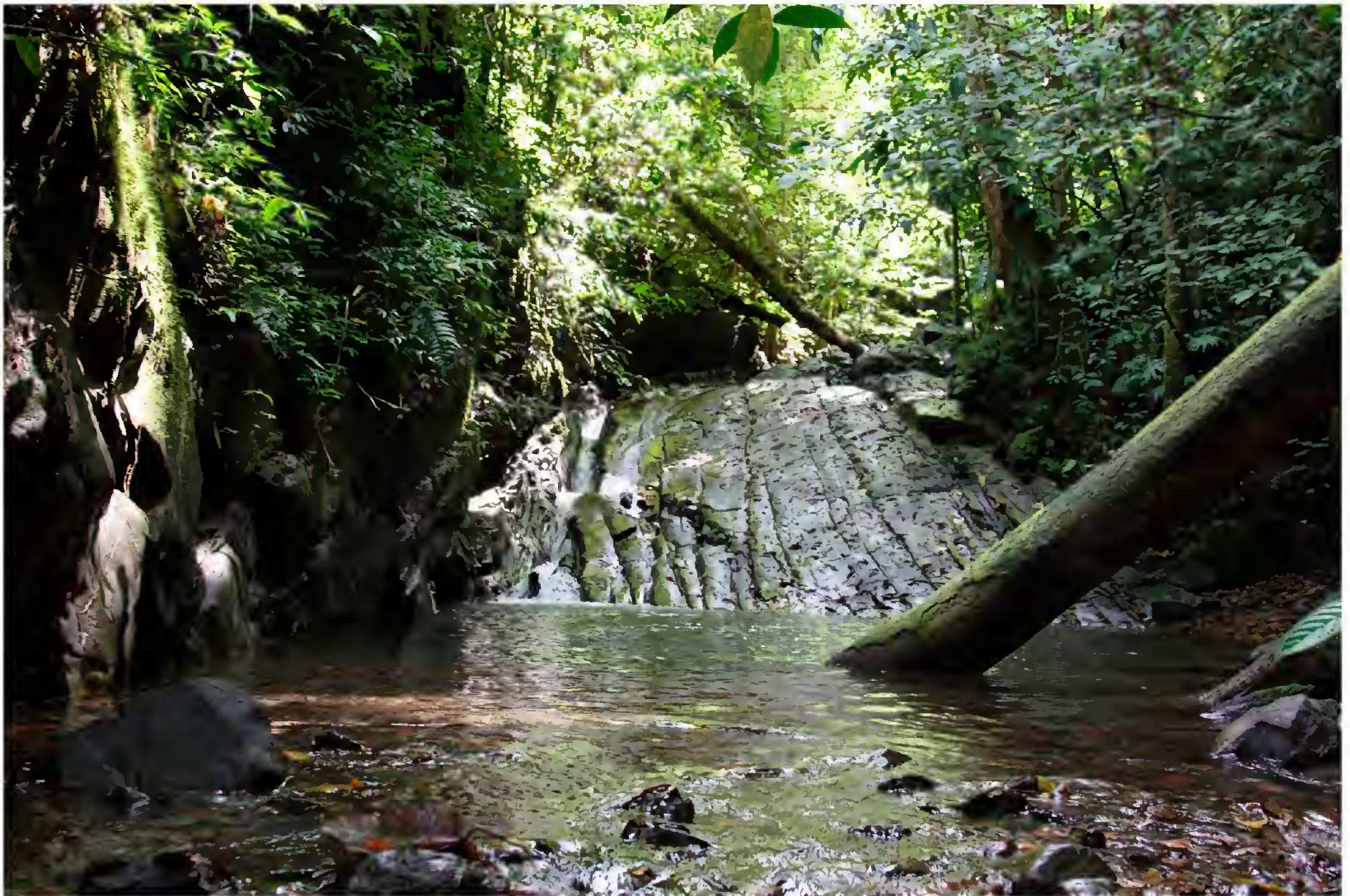
Figures 1-3. *Cyrtodactylus papuensis* (Brongersma, 1934) in its natural environment, at observation site near Aduway village, southern Misool Is., E Indonesia (photo: M. Kalniņš).



**Plate 126**

RÖSLER, H., SCHEIDT, U. & TELNOV, D.: First record of *Cyrtodactylus papuensis* (Brongersma, 1934) ...

1



2



Figures 1-2. Riverine forest in River Hakau valley, S Misool Island, E Indonesia - observation spot for *Cyrtodactylus papuensis* (Brongersma, 1934) (photo: D. Telnov).